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(54) **SEALING, TRIMMING OR GUIDING STRIPS**

DICHTUNGS-FÜHRUNGS-ODER RANDSTREIFEN

BANDES D'ETANCHEITE, DE DEGAUCHISSAGE OU DE GUIDAGE

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Description

[0001] The invention relates to a sealing, trimming or guiding strip for a window frame in a motor vehicle body, comprising first strip means formed of one-piece moulded construction and extending along the length of the strip and defining a first longitudinally extending face intended to be on the outside of the vehicle in use, and second strip means extending longitudinally along the strip and attached to the first strip means to define the second, opposite, longitudinal face of the strip and intended to be on the inside of the vehicle in use, the strip incorporating extruded material.

[0002] Such a strip is shown in GB-A-2 272 721. This strip provides a so-called waist seal for placing along one of the rigid edges defining a generally horizontal open slot in a vehicle door, through which a movable window glass for the window carried by the door can be raised or lowered. The strip has a moulded portion for placing on the outside of the vehicle door and an extruded sealing part attached to the moulded part and facing inwardly of the door.

[0003] The present invention is concerned with the provision of a seal for extending around the whole of the frame of the window opening, not merely along the waist of the door.

[0004] According to the invention, therefore, the first strip means is in the form of a continuous closed loop and having at least one sharp-angled corner matching a sharp-angled corner of the window frame, and in that the extruded material defines at least first and second separate parts each extending along a respective part, only, of the length of the strip for sealing against the slidable pane, the two separate parts being of respectively different cross-sectional shapes along the strip and being overlapped by at least the first strip means.

[0005] Further developments in line with the invention according to claim 1 are referred to in the dependent claims 2 to 18.

[0006] Sealing, trimming or guiding strips for vehicle window frames will now be described, by way of example only, with reference to the accompanying diagrammatic drawings in which:

Figure 1 is a side view of one of the strips;

Figure 2 is a cross-section on the line II-II of Figure 1;

Figure 3 is a cross-section on the line III-III of Figure 1;

Figure 4 is a view corresponding to Figure 2 showing a modified version of one of the strips;

Figure 5 is a view corresponding to Figure 3 showing a modified version of one of the strips; and

Figure 6 is a view corresponding to Figure 5 showing a further modified version of one of the strips.

[0007] The sealing, trimming or guiding strip indicated generally at 5 in Figure 1 is for use in the window opening of the upper part of a vehicle door. In particular, the strip 5 may be used for the window opening in the rear door of a vehicle. The strip thus has a first part surrounding a window opening 6 in which a window glass (not shown) can move in a vertical direction, being raised from and lowered into the lower part of the vehicle door. The second part of the strip 5 defines an opening 8 in which is received a fixed window pane (forming the so-called "quarter light" of the rear door). A cross piece 9 is common to both parts of the seal. The strip 5 around the window opening 6 thus defines channels along the vertical sides and the top of the opening 6 and a seal extending alongside a gap which runs along the horizontal part, or waist. The window glass passes through this gap as it rises from or is lowered into the lower part of the door. Around the whole of the opening 8, the strip defines a channel for receiving the fixed piece of window glass. Figure 1 views the strip 5 from outside the vehicle.

[0008] In accordance with a feature of the invention, the strip 5 is partially of moulded construction and partially of extruded construction. Thus, the whole of the strip 5 surrounding the opening 8, including the cross piece 9, is produced by a moulding operation, and is integrally moulded with the part of the strip defining the face of the remainder of the strip on the outside of the vehicle, that is, the face of the strip is extending around the opening 6 from the point A through the point B to the point C. The moulded part is produced in a single moulding operation from thermoplastic olefin material (TPO) and is thus produced in a single piece. Thus, the necessary sharp corners at A, B and C are easily produced by the moulding operation. TPO is an advantageous material to use for the moulding operation because it has a good appearance, is easily moulded (the mould itself requires much less frequent cleaning than when using other materials such as rubber) and it can be easily produced in different colours.

[0009] Figure 2 shows how, over the region BC, the outer face 5A of the strip is defined by the moulded TPO material 10 while the inner face of the strip (that is, the face 5B of the strip on the inside of the vehicle) is formed by the face of a channel-shaped structure 11 carrying a lip 12. The channel-shaped structure 11 is made of extruded EPDM material 14 in which is partially embedded a channel-shaped metal reinforcing carrier 16. The material 14 is integrally extruded with the lip 12.

[0010] The metal carrier is made of channel-shaped metal, slotted or slitted to improve its flexibility. For example, it may comprise inverted U-shaped elements arranged next to each other to define the channel and either integrally connected together by short flexible connecting links or perhaps entirely disconnected from each other. Looped wire may be used instead. Other

forms of carrier can be used. Along one face 16A of the carrier, it is not covered by the extruded EPDM material 14.

[0011] The material 14 is extruded to provide integral lips 18 and shoulders 20 which are directed towards each other across the width of the channel.

[0012] The carrier 16 may be incorporated in the extruded EPDM material 14 by means of a cross-head extruder.

[0013] Figure 2 shows how the structure 10 is shaped to match the shape of the moulded TPO material 10. The structure 11 is secured to the TPO material 10 using a suitable adhesive. This adhesive is applied between the TPO material 10 and the lip 12 along a surface 26, between the TPO material 10 and the surface 16A of the carrier 16 where it is not covered by the extruded EPDM material 14, and along a further surface 27.

[0014] When the strip 5 is mounted in position on the vehicle body, the channel 28 of the structure 11 embraces a supporting flange 30 running along the waist of the door alongside the gap 32 through which the window glass is raised and lowered. The channel 28 grips the flange 30 and thus supports the strip 5 along the waist. The gripping process is assisted by the lip 18 and the shoulders 20, 22. Advantageously, the lips 18 can be co-extruded so as to be relatively soft, compared with the rest of the extruded material 14, to increase their frictional grip on the flange. The channel 28 thus supports the structure 11 so that the lip 12 is positioned alongside the gap 32 through which the glass pane moves. The lip 12 preferably has a flocked surface 34 for making a good low friction seal on the outer face of the glass.

[0015] A suitable seal (not shown) is preferably provided to run along the waist of the door on the opposite side of the gap 32 so as to seal against the inner surface of the glass.

[0016] It will be appreciated that the TPO material 10 need not be adhesively secured to the extruded structure but may be directly moulded thereto.

[0017] Figure 3 shows the form which the strip 5 takes over the region between points A and B in Figure 1. Over this region, the moulded TPO material defining the outer face 5A of the strip is shown at 40. The moulded material comprises a generally L-shaped portion with one limb of the L folded over on itself to define a slot 42. Over the length AB, the strip 5 is mounted within a metal mounting channel 44 forming part of the window frame for the opening 6 (Fig. 1). The side walls of the channel 44 define flanges 44A and 44B where the channel is secured (as by welding) to the outer and inner door panels. The moulded part 40 of the seal 5 is mounted in the channel 44 so that its slot 42 is engaged over the flange 44A of the channel 44. The other limb of the "L" lies in the base of the channel 44 and is provided with lips 46 and 48 which engage under inwardly directed shoulders 50 and 52 of the channel 44.

[0018] In addition, over the region AB the strip 5 incorporates an extruded structure 54. The structure 54

is extruded from EPDM material 56 to define a channel-shaped part 58 and two lips 60 and 62. The channel-shaped part 58 incorporates a metal carrier 64 which may be of similar construction to the metal carrier 16 of Figure 2. The extruded EPDM material 56 defines integral lips 66 and shoulders 68 corresponding to the lips 18 and the shoulders 20 of Figure 2. Along a surface 70, the extruded EPDM material is profiled to match the profile of the lower limb of the moulded part 40.

[0019] As shown, the structure 54 is mounted on the flange 44B, the channel-shaped part 54 firmly gripping the flange 44B.

[0020] In this way, the moulded part 40 and the extruded structure 54 together define opposite walls of a glass run channel 72 in which the window glass 76 is positioned. The outer face 76A of the glass 76 makes sealing contact against a flocked surface 78 on the moulded part 40. The inner face 76B of the window glass 76 makes contact with a flocked surface 80 on the lip 60. Lip 62 has a flocked surface 82 which makes sealing contact with the edge 76C of the glass 76.

[0021] The moulded part 40 and the extruded structure 54 can be adhesively secured to each other along the line 70. However, this is not necessary because the two parts are held in the correct position relative to each other by their respective engagement with the flanges 44A and 44B.

[0022] The strip 5 is thus advantageous because it uses a moulded construction, made from TPO, for the outwardly facing surface of the strip, producing a pleasing appearance and a construction in which the sharp corners in the seal can be produced integrally during the moulding operation. The possibility of slight change in colouration at the sharp corners, which can occur when extruded lengths of sealing strip are connected together at sharp corners by separately moulded inserts, is thus avoided. In addition, the use of the extruded structures on the inside face of part of the seal 5 ensures very effective sealing against the glass surface, TPO not being so effective as sealing material.

[0023] In the foregoing description, it will be appreciated that the moulded TPO sections may be directly moulded onto the extruded parts and need not be secured by adhesive.

[0024] Referring to the modified strip of Figure 4, the TPO moulded part 10 is formed in a different shape and extends along the lip 12 as shown.

[0025] The TPO 10 is directly moulded onto the extruded part 11. It will be appreciated that the TPO 10 need not be directly moulded onto the extruded part 11 but may be adhesively secured thereto using a suitable adhesive.

[0026] Referring to the modified strip of Figure 5, the extruded part 58 is now generally channel-shaped. The extruded part 58 carries a first TPO moulded section 90 (shown on the left hand side of Figure 5) defining the outer face 5A of the strip as shown in Figure 5. Additionally, a second TPO moulded section 92 is carried on the

right hand side of Figure 5 defining the face 5B of the strip.

[0027] The TPO moulded sections 90,92 are directly moulded onto the extruded part 58. However, it will be appreciated that the TPO sections 90,92 need not be directly moulded onto the extruded part 58 but may be adhesively secured thereto.

[0028] In the modified strip of Figure 5, the channel-shaped carrier 64 is omitted. However, it will be appreciated that a carrier may be incorporated if desired.

[0029] The modified strip of Figure 5 is thus advantageous because it uses a moulded TPO construction for the outwardly and inwardly facing surface of the strip, producing a pleasing appearance on the exterior and interior of the vehicle.

[0030] Figure 6 shows a further modified strip in which the second TPO section 92 of Figure 5 is extended along the uppermost surface of the lip 60. This TPO section 92 is directly moulded onto the extruded part 58. However, it will be appreciated that the TPO section 92 may be adhesively secured to the extruded part 58.

[0031] In the modified strip of Figure 6 the carrier 64 is omitted. However a suitable carrier may be incorporated if required.

[0032] The TPO section 92 again provides a pleasing appearance on the interior of the vehicle.

Claims

1. A sealing, trimming or guiding strip for a window frame with a slidable pane in a motor vehicle body, comprising first strip means (10;40) formed of one-piece moulded construction and extending along the length of the strip and defining a first longitudinally extending face (5A) intended to be on the outside of the vehicle in use, and second strip means (11;54;92) extending longitudinally along the strip and attached to the first strip means (10;40) to define the second, opposite, longitudinal face (5B) of the strip and intended to be on the inside of the vehicle in use, the strip incorporating extruded material (11;54;58), characterised in that the first strip means (10;40) is in the form of a continuous closed loop (6) and having at least one sharp-angled corner (A,C) matching a sharp-angled corner of the window frame, and in that the extruded material (11; 54;58) defines at least first and second separate parts (11, 54) each extending along a respective part, only, of the length of the strip for sealing against the slidable pane, the two separate parts (11,54) being of respectively different cross-sectional shapes along the strip and being overlapped by at least the first strip means (10;40).
2. A strip according to claim 1, characterised in that both strip means (40,92) are of one-piece moulded construction, and the extruded material (11,58) is

between the two strip means (10,92) with the first and second separate parts (11,58) of the extruded material being joined together by both the first strip means (40) and the second strip means (92).

3. A strip according to claim 2, characterised in that the second separate part (58) of the extruded material defines a window guiding channel (72).
4. A strip according to claim 1, characterised in that the second strip means (11,54) is formed of by the extruded material.
5. A strip according to claim 4, characterised in that the second separate part (58) of the extruded material is arranged together with the first strip means (40) to define a window guiding channel (72).
6. A strip according to claim 5, characterised in that the second separate part (58) of the extruded material is held adjacent to the first strip means (40) where they together define the window guiding channel (72) by being mounted on respective generally parallel supports (44A,44B) but are not otherwise attached to each other there.
7. A strip according to claim 6, characterised in that the two supports (44A,44B) are opposite side walls of a rigid channel (44), the second separate part (58) of the extruded material and the first strip means (40) respectively embracing the side walls (44A,44B) and at least one of them also extending along the base of the channel.
8. A strip according to any one of claims 3,5,6 and 7, characterised in that the second part (58) of the extruded material defines one or more lips (60,62) extending partway towards the first strip means (40) across the window guiding channel (72).
9. A strip according to any preceding claim, characterised in that along at least a portion of the length of the continuous loop, a metal reinforcement (16;64) is at least partially embedded in the extruded material.
10. A strip according to claim 9, characterised in that the metal reinforcement (16) defines a channel (28) for gripping a mounting support (30), and in that the first strip means (10) is secured to an outside wall surface of that channel.
11. A strip according to claim 10, characterised in that the material of the second strip means (11) defining the channel (28) for gripping the mounting support (30) also defines a lip (12) extending away from an outside wall surface of that channel.

12. A strip according to any preceding claim, characterised in that along at least a portion of the continuous loop the or each strip means (10;40;92) of the moulded construction is adhesively secured to the extruded material (11;54).
13. A strip according to any one of claims 1 to 11, characterised in that along at least a portion of the continuous loop the or each strip means (10;40;92) of the moulded construction is moulded directly onto the extruded material (11;54).
14. A strip according to any preceding claim, characterised in that the second strip means (11;54;92) does not extend around the whole length of the closed loop (6), the remaining part (9) of the loop comprising only the first strip means (40).
15. A strip according to any one of claims 1 to 13, characterised in that the strip forms a second loop (8) integral with the first loop (6), at least part (9) of the length of the second loop (8) being common to a corresponding part of the length of the first loop (6), the second loop (8) forming a frame for a second window, the second loop (8) being moulded integrally with the first strip means (40) and being devoid of the second strip means (11;54;92) and the extruded material.
16. A strip according to claim 15, characterised in that the second loop (8) defines a continuous channel for receiving a fixed window glass for the second window.
17. A strip according to any preceding claim, characterised in that the moulded material is a thermoplastic olefin (TPO).
18. A strip according to any preceding claim, characterised in that the extruded material is EPDM.

Patentansprüche

1. Dichtungs-, Rand- oder Führungsleiste für einen Fensterrahmen mit einer verschiebbaren Scheibe in einer Kraftfahrzeugkarosserie, mit einem ersten Leistenmittel (10; 40), das aus einer einstückig geformten Konstruktion geformt ist und sich entlang der Länge der Leiste erstreckt und eine erste sich längs erstreckende Fläche (5A) bildet, die dafür vorgesehen ist, im Betrieb auf der Außenseite des Fahrzeugs angeordnet zu sein, und mit einem zweiten Leistenmittel (11; 54; 92), das sich der Länge nach entlang der Leiste erstreckt und an das erste Leistenmittel angehängt ist, um die zweite, entgegengesetzte, sich längs erstreckende Fläche (5B) der Leiste zu bilden und die dafür vorgesehen ist,

im Betrieb auf der Innenseite des Fahrzeugs angeordnet zu sein, wobei der Leiste extrudiertes Material (11; 54; 58) beigemischt ist,

dadurch gekennzeichnet,

daß das erste Leistenmittel (10; 40) in der Form eines fortlaufenden geschlossenen Rings (6) ausgebildet ist und wenigstens eine scharfwinklige Ecke (A, C) aufweist, die mit einer scharfwinkligen Ecke des Fensterrahmens zusammenpaßt und dadurch, daß das extrudierte Material (11; 54; 58) wenigstens erste und zweite separate Teile (11, 54) bildet, die sich jedes entlang entlang einem nur zum Abdichten gegen die verschiebbare Scheibe dienenden Teil der Länge der Leiste erstrecken, wobei die zwei separaten Teile (11, 54) entlang der Leiste von entsprechend verschiedener Querschnittsform sind und zumindest von dem ersten Leistenmittel (10; 40) überlappt werden.

2. Leiste nach Anspruch 1, dadurch gekennzeichnet, daß beide Leistenmittel (40, 92) aus einer einstückig geformten Konstruktion bestehen und das extrudierte Material (11, 58) zwischen den zwei Leistenmitteln (10, 92) angeordnet ist, wobei das erste und zweite separate Teil (11, 58) des extrudierten Materials durch beide, das erste Leistenmittel (40) und das zweite Leistenmittel (92), aneinandergesetzt sind.
3. Leiste nach Anspruch 2, dadurch gekennzeichnet, daß das zweite separate Teil (58) des extrudierten Materials einen Fensterführungs kanal (72) bildet.
4. Leiste nach Anspruch 1, dadurch gekennzeichnet, daß das zweite Leistenmittel (11, 54) durch das extrudierte Material ausgebildet ist.
5. Leiste nach Anspruch 4, dadurch gekennzeichnet, daß das zweite separate Teil (58) des extrudierten Materials zusammen mit dem ersten Leistenmittel (40) angeordnet ist, um einen Fensterführungs kanal (72) zu bilden.
6. Leiste nach Anspruch 5, dadurch gekennzeichnet, daß das zweite separate Teil (58) des extrudierten Materials dort angrenzend an das erste Leistenmittel (40) gehalten wird, wo diese zusammen dadurch den Fensterführungs kanal (72) bilden, daß sie auf entsprechenden, im allgemeinen parallelen Trägern (44A, 44B) angeordnet sind, aber dort sonst nicht miteinander verbunden sind.
7. Leiste nach Anspruch 6, dadurch gekennzeichnet, daß die Träger (44A, 44B) gegenüberliegende Seitenwände eines steifen Kanals (44) sind, wobei das zweite separate Teil (58) des extrudierten Materials und das erste Leistenmittel (40) die Seitenwände (44A, 44B) entsprechend umgreifen und sich we-

nigstens eines von diesen auch entlang der Basis des Kanals erstreckt.

8. Leiste nach einem der Ansprüche 3, 5, 6 und 7, dadurch gekennzeichnet, daß der zweite Teil (58) des extrudierten Materials eine oder mehrere Lippen (60, 62) bildet, die sich teilweise quer über den Fensterführungschanal (72) in Richtung auf das erste Leistenmittel (40) erstrecken. 5
9. Leiste nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß entlang wenigstens einem Teil der Länge des fortlaufenden Rings eine Metallverstärkung (16; 64) zumindest teilweise in das extrudierte Material eingebettet ist. 10
10. Leiste nach Anspruch 9, dadurch gekennzeichnet, daß die Metallverstärkung (16) einen Kanal (28) zum Klemmen eines Befestigungsträgers (30) bildet und dadurch, daß das erste Leistenmittel (10) an einer äußeren Wandoberfläche dieses Kanals befestigt ist. 15
11. Leiste nach Anspruch 10, dadurch gekennzeichnet, daß das Material des zweiten Leistenmittels (11), das den Kanal (28) zum Klemmen des Befestigungsträgers (30) bildet, auch eine Lippe (12) bildet, die sich fort von einer äußeren Wandoberfläche dieses Kanals erstreckt. 20
12. Leiste nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß entlang wenigstens einem Bereich des fortlaufenden Rings das oder jedes Leistenmittel (10; 40; 92) der geformten Konstruktion klebend an dem extrudierten Material (11; 54) befestigt ist. 25
13. Leiste nach einem der Ansprüche 1 bis 11, dadurch gekennzeichnet, daß entlang wenigstens einem Bereich des fortlaufenden Rings das oder jedes Leistenmittel (10; 40; 92) der geformten Konstruktion direkt auf das extrudierte Material (11; 54) geformt ist. 30
14. Leiste nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß das zweite Leistenmittel (11, 54; 92) sich nicht entlang der gesamten Länge des geschlossenen Rings (6) erstreckt und der restliche Teil (9) des Rings nur das erste Leistenmittel (40) umfaßt. 35
15. Leiste nach einem der Ansprüche 1 bis 13, dadurch gekennzeichnet, daß die Leiste einen einstückig mit dem ersten Ring (6) ausgebildeten zweiten Ring (8) bildet, wobei wenigstens ein Teil (9) der Länge des zweiten Rings (8) gleich ist mit einem entsprechenden Teil der Länge des ersten Rings (6), der zweite Ring (8) einen Rahmen für ein zweites Fenster bil-

det und der zweite Ring (8) einstückig mit dem ersten Leistenmittel (40) geformt ist und frei von dem zweiten Leistenmittel (11; 54; 92) und dem extrudierten Material ist.

16. Leiste nach Anspruch 15, dadurch gekennzeichnet, daß der zweite Ring (8) einen fortlaufenden Kanal zur Aufnahme einer feststehenden Fensterscheibe für das zweite Fenster bildet. 40
17. Leiste nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß das geformte Material ein thermoplastisches Olefin (TPO) ist. 45
18. Leiste nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß das extrudierte Material EPDM ist. 50

Revendications

1. Bande d'étanchéité, de décoration ou de guidage pour un cadre de fenêtre avec une vitre coulissante dans une carrosserie de véhicule à moteur, comportant des premiers moyens de bande (10; 40) formés par une construction moulée d'une seule pièce et s'étendant sur la longueur de la bande et définissant une première face s'étendant longitudinalement (5A) prévue pour être sur le côté extérieur du véhicule lors de l'utilisation, et des seconds moyens de bande (11; 54; 92) s'étendant longitudinalement le long de la bande et fixés sur les premiers moyens de bande (10; 40) afin de définir la deuxième face longitudinale opposée (5B) de la bande et prévus pour être sur l'intérieur du véhicule lors de l'utilisation, la bande incorporant une matière extrudée (11; 54; 58), caractérisée en ce que les premiers moyens de bande (10; 40) sont sous la forme d'une boucle fermée continue (6) et ayant au moins un coin à angle aigu (A, C) correspondant à un coin à angle aigu du cadre de fenêtre, et en ce que la matière extrudée (11; 54; 58) définit au moins des première et deuxième parties séparées (11, 54) qui s'étendent chacune le long d'une partie respective, seulement, de la longueur de la bande afin d'assurer l'étanchéité contre la vitre coulissante, les deux parties séparées (11, 54) étant de formes en coupe respectivement différentes le long de la bande et étant chevauchées par au moins les premiers moyens de bande (10; 40). 55
2. Bande selon la revendication 1, caractérisée en ce que les deux moyens de bande (40, 92) sont d'une construction moulée d'une seule pièce, et la matière extrudée (11, 58) est entre les deux moyens de bande (10, 92) avec les première et deuxième parties séparées (11, 58) de la matière extrudée qui sont reliées ensemble par les premiers moyens de ban-

de (40) et les seconds moyens de bande (92).

3. Bande selon la revendication 2, caractérisée en ce que la deuxième partie séparée (58) de la matière extrudée définit un canal de guidage de fenêtre (72). 5
4. Bande selon la revendication 1, caractérisée en ce que les seconds moyens de bande (11, 54) sont formés par la matière extrudée. 10
5. Bande selon la revendication 4, caractérisée en ce que la deuxième partie séparée (58) de la matière extrudée est prévue avec les premiers moyens de bande (40) afin de définir un canal de guidage de fenêtre (72). 15
6. Bande selon la revendication 5, caractérisée en ce que la deuxième partie séparée (58) de la matière extrudée est maintenue adjacente aux premiers moyens de bande (40) où ils définissent ensemble le canal de guidage de fenêtre (72) en étant montés sur des supports globalement parallèles respectifs (44A, 44B) mais ne sont pas par ailleurs fixés l'un à l'autre. 20
7. Bande selon la revendication 6, caractérisée en ce que les deux supports (44A, 44B) sont des parois latérales opposées d'un canal rigide (44), la deuxième partie séparée (58) de la matière extrudée et les premiers moyens de bande (40) entourant de manière respective les parois latérales (44A, 44B) et au moins l'un d'eux s'étendant également le long de la base du canal. 30
8. Bande selon l'une quelconque des revendications 3, 5, 6 et 7, caractérisée en ce que la deuxième partie (58) de la matière extrudée définit une ou plusieurs lèvres (60, 62) qui s'étendent partiellement vers les premiers moyens de bande (40) sur le canal de guidage de fenêtre (72). 35
9. Bande selon l'une quelconque des revendications précédentes, caractérisée en ce que, le long d'au moins une partie de la longueur de la boucle continue, un renfort métallique (16; 64) est au moins partiellement noyé dans la matière extrudée. 40
10. Bande selon la revendication 9, caractérisée en ce que le renfort métallique (16) définit un canal (28) destiné à saisir un support de montage (30), et en ce que les premiers moyens de bande (10) sont fixés sur la surface de paroi extérieure de ce canal. 45
11. Bande selon la revendication 10, caractérisée en ce que la matière des seconds moyens de bande (11) définissant le canal (28) afin de saisir le support de montage (30) définissent également une lèvre 50

(12) qui s'étend à l'écart d'une surface de paroi extérieure de ce canal.

12. Bande selon l'une quelconque des revendications précédentes, caractérisée en ce que, le long d'au moins une partie de la boucle continue, les ou chacun des moyens de bande (10; 40; 92) de la construction moulée sont fixés de manière adhésive sur la matière extrudée (11; 54). 55
13. Bande selon l'une quelconque des revendications 1 à 11, caractérisée en ce que, le long d'au moins une partie de la boucle continue, les ou chacun des moyens de bande (10; 40; 92) de la construction moulée sont moulés directement sur la matière extrudée (11; 54).
14. Bande selon l'une quelconque des revendications précédentes, caractérisée en ce que les seconds moyens de bande (11; 54; 92) ne s'étendent pas sur toute la longueur de la boucle fermée (6), la partie restante (9) de la boucle comportant seulement les premiers moyens de bande (40).
15. Bande selon l'une quelconque des revendications 1 à 13, caractérisée en ce que la bande forme une deuxième bande (8) d'un seul tenant avec la première boucle (6), au moins une partie (9) de la longueur de la deuxième boucle (8) étant commune à une partie correspondante de la longueur de la première boucle (6), la deuxième boucle (8) formant un cadre pour une deuxième fenêtre, la deuxième boucle (8) étant moulée intégralement avec les premiers moyens de bande (40) et étant exempte des seconds moyens de bande (11; 54; 92) et de la matière extrudée.
16. Bande selon la revendication 15, caractérisée en ce que la deuxième boucle (8) définit un canal continu destiné à recevoir une vitre fixe pour la deuxième fenêtre.
17. Bande selon l'une quelconque des revendications précédentes, caractérisée en ce que la matière moulée est une oléfine thermoplastique (TPO).
18. Bande selon l'une quelconque des revendications précédentes, caractérisée en ce que la matière extrudée est de l'EPDM.

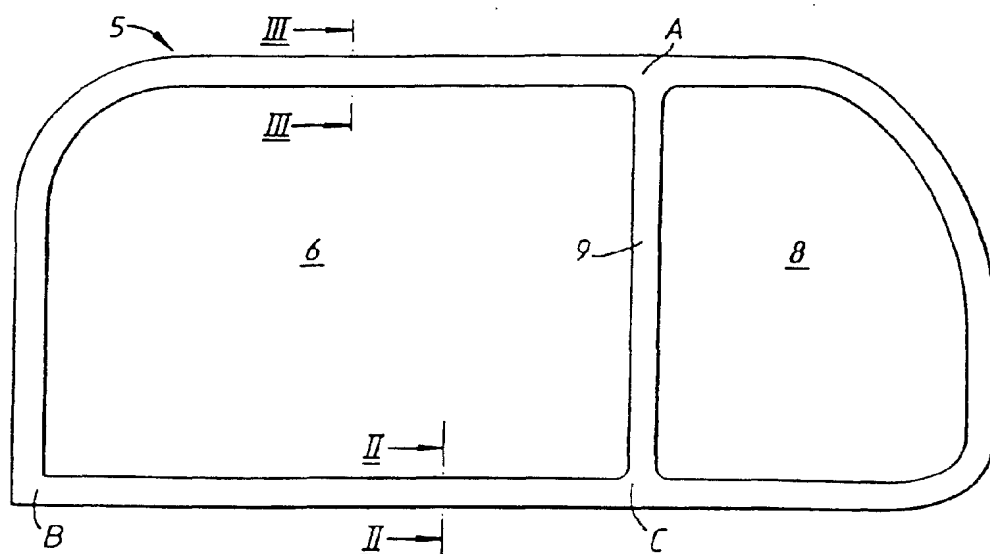


Fig. 1

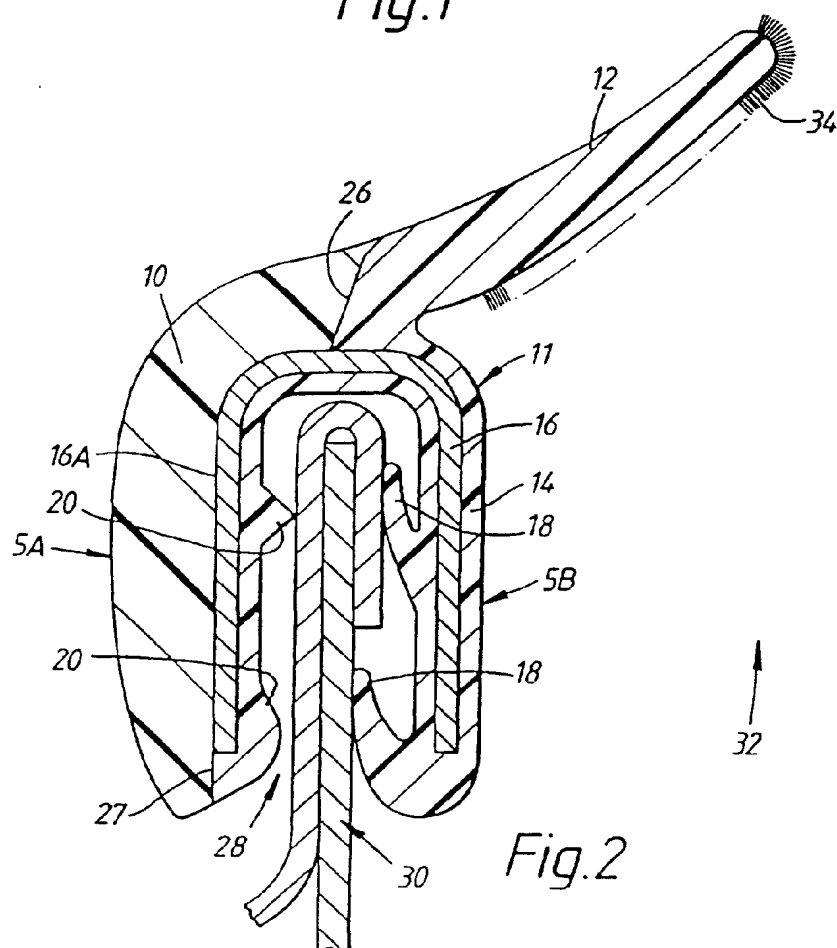


Fig. 2

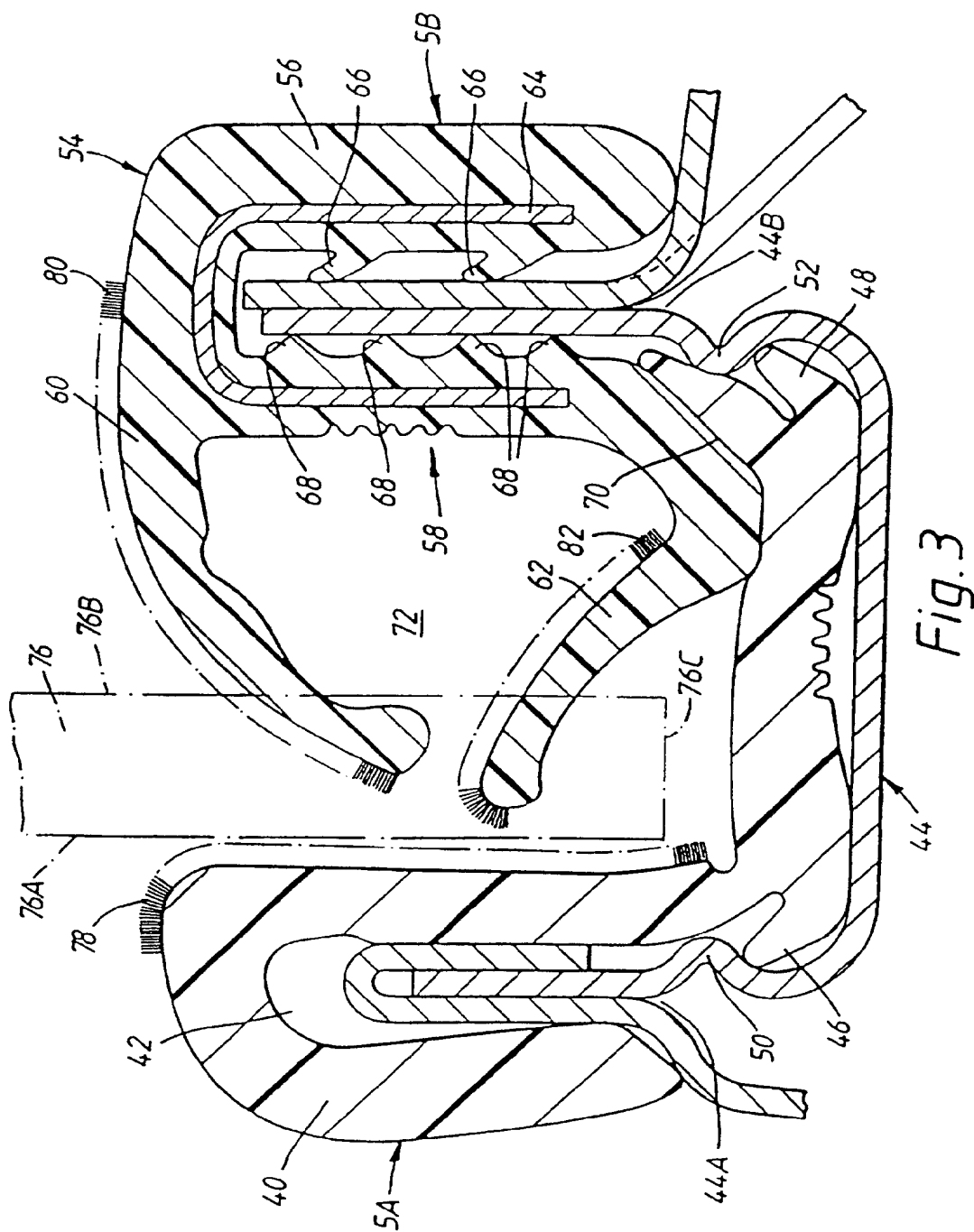


Fig. 3

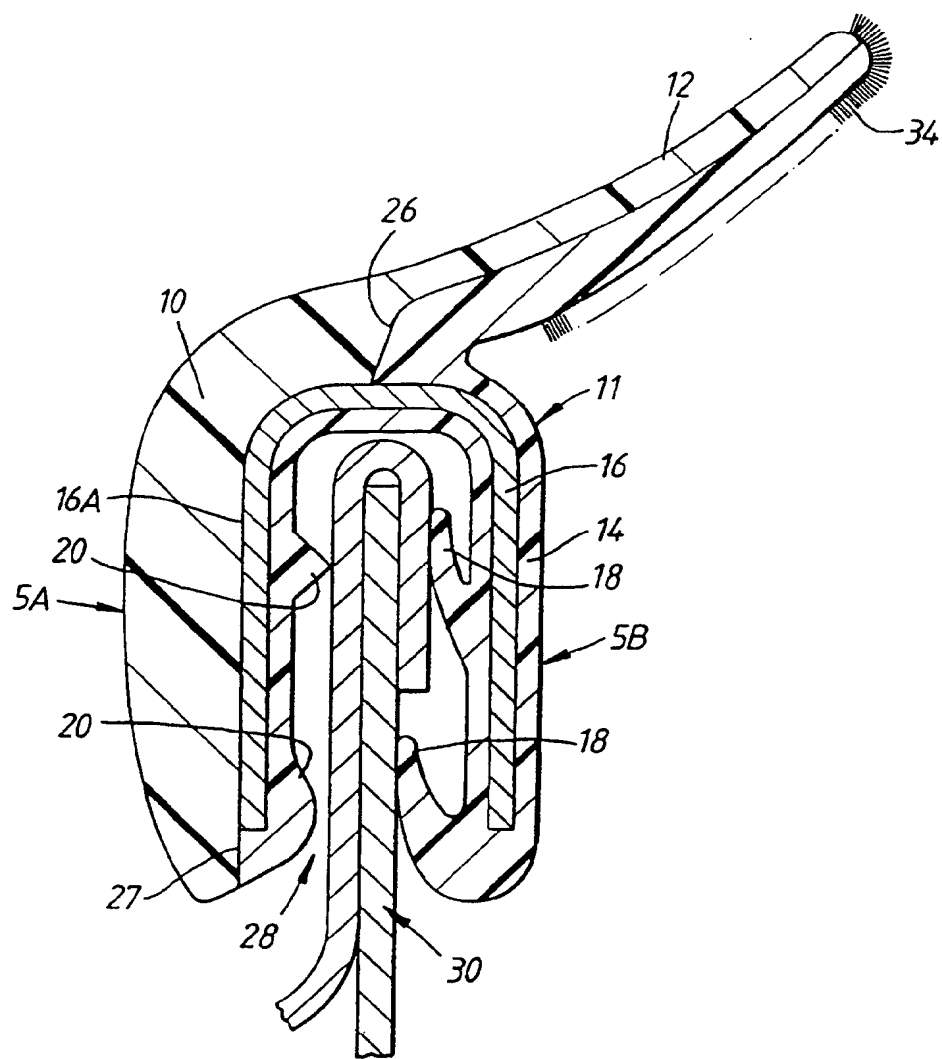


Fig.4

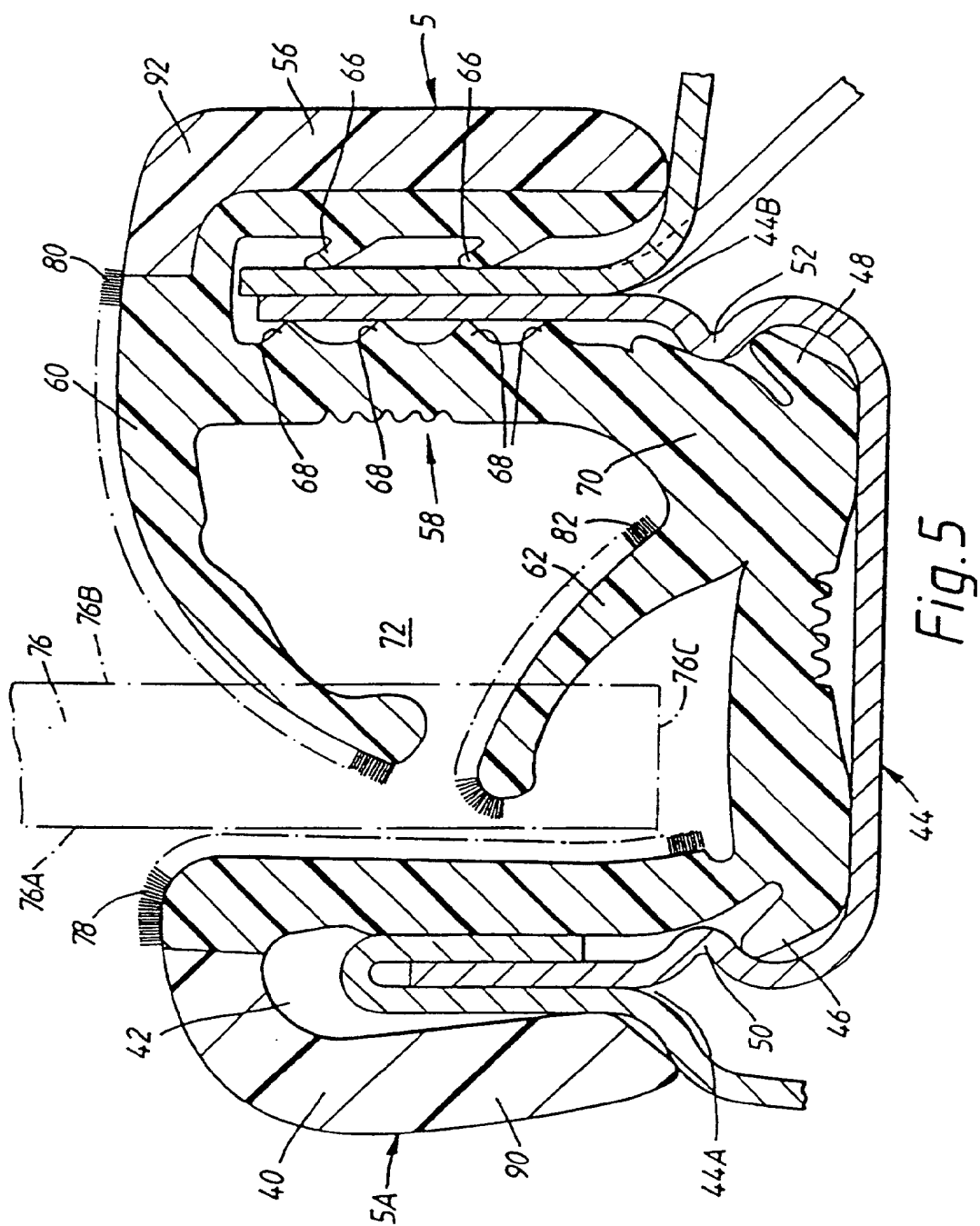


Fig. 5

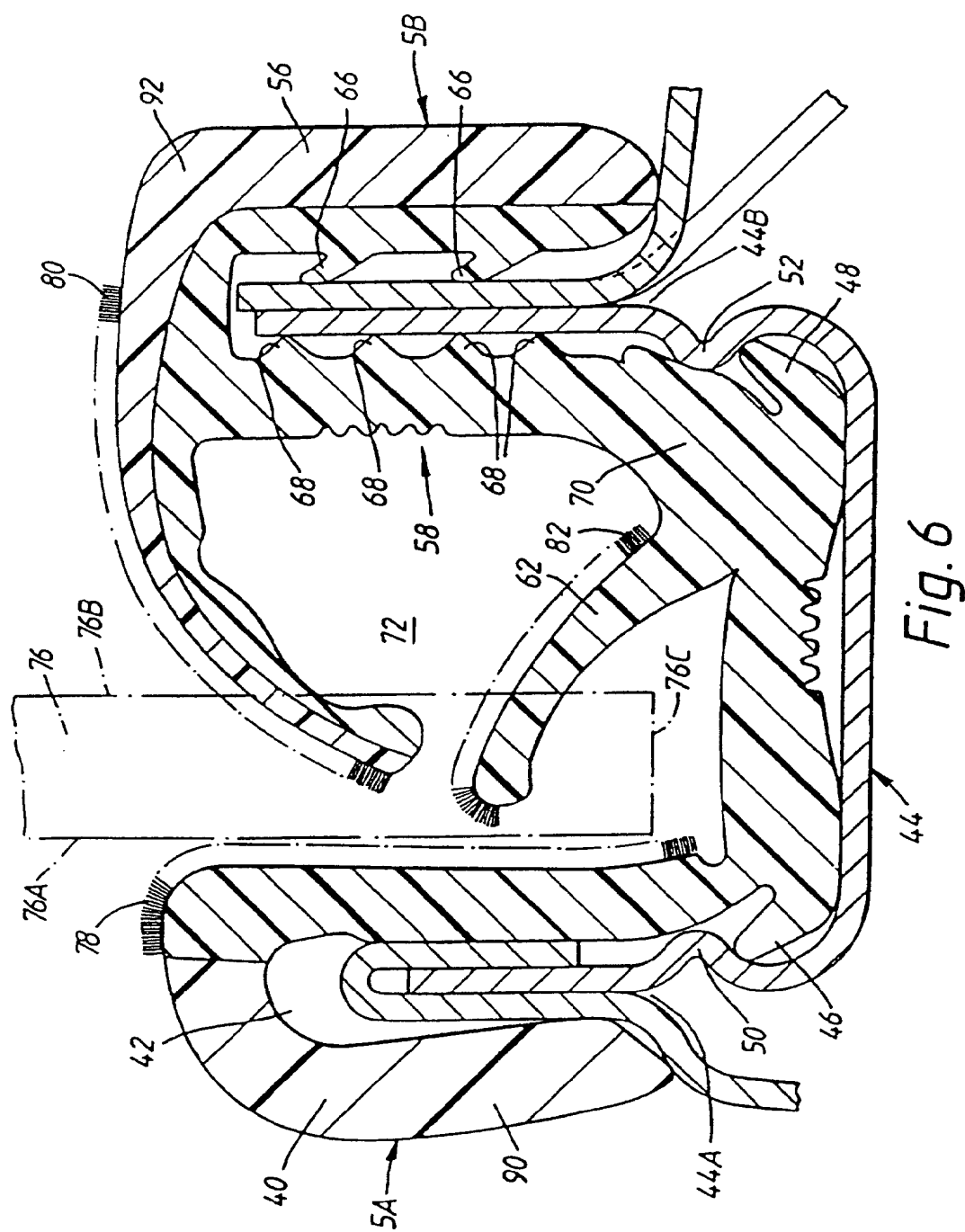


Fig. 6